

# KLINGER® Graphite Laminate TSM

KLINGER® Graphite Laminate TSM fulfills the TA-Luft requirements and offers safety at high temperatures up to 450°C.

Glueless gasket material consisting of impregnated expanded graphite and a 0.1mm thick tanged stainless steel insert.

Stable physical properties over the whole temperature range.

## Key features:

- » Mechanically bonded tanged stainless steel insert
- » Excellent high temperature resistance
- » Excellent chemical resistance

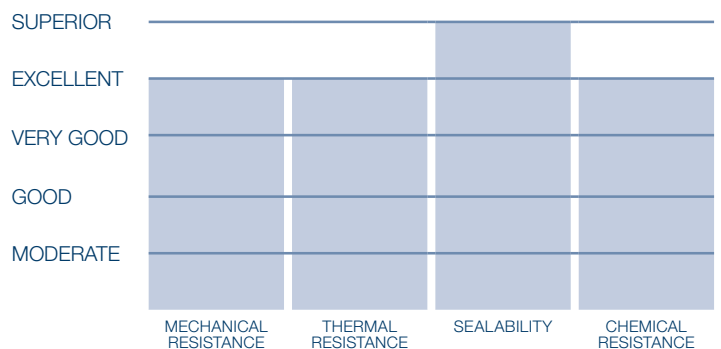
## Benefits:

- » Superior tightness (TA-Luft approval)
- » Stable physical properties over the whole temperature range

## Certificates and approvals:

- » TA-Luft (Clean Air)

## Properties: referring to Graphite product range



## Industries:



## Typical technical data for KLINGER® Graphite Laminate TSM:

			TSM 150B	TSM 200B	TSM 300B-2
Thickness	mm		1.5	2.0	3.0
Density of graphite	g/cm <sup>3</sup>		1.0	1.0	1.0
Ash content graphite DIN 51903	%		≤ 2.0	≤ 2.0	≤ 2.0
Insert	Material	1.4401 (or 1.4404)			
Tanged stainless steel sheet	Thickness	mm	0.1	0.1	0.1
	Number of inserts		1	1	2
Compressibility ASTM F36A	%		30 - 45	30 - 45	30 - 45
Recovery ASTM F36A	%		15 - 25	15 - 25	15 - 25
Residual stress DIN 52913	$\sigma_D$ 16h, 300°C, 50 N/mm <sup>2</sup>	N/mm <sup>2</sup>	≥ 45	≥ 45	≥ 45

## Dimensions of the standard sheets:

### Sizes:

1000 x 1000 mm

### Thicknesses:

1.5 mm, 2.0 mm, 3.0 mm

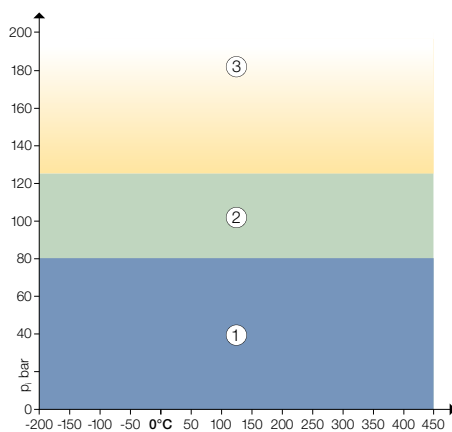
### Tolerances:

Thickness ± 5%

Length ± 4 mm, width ± 4 mm

Other thicknesses, sizes and inserts on request.

## pT diagram for thickness 2.0 mm:



①

In area one, the gasket material is normally suitable subject to chemical compatibility.

②

In area two, the gasket material may be suitable but a technical evaluation is recommended.

③

In area three, do not install the gasket without a technical evaluation.

Always refer to the chemical resistance of the gasket to the media.

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Certified acc. to DIN EN ISO 9001:2008 Subject to technical alterations. Status: June 2016

Rich. Klinger Dichtungstechnik GmbH & Co KG » Am Kanal 8-10 » A-2352 Gumpoldskirchen, Austria  
 Tel +43 (0) 2252/62599-137 » Fax +43 (0) 2252/62599-296 » e-mail: marketing@klinger.co.at



www.klinger.co.at